

Reported Early Syphilis Infections in Kansas Between 01-01-2004 and 12-31-2004

Kansas Department of Health and Environment
Bureau of Epidemiology and Disease Prevention

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In calendar year 2003, 81% (30) of the 37 total early syphilis cases reported in Kansas lived in Johnson and Wyandotte Counties. The outbreak in those counties was associated with illicit drug use (usually methamphetamine/crack cocaine) and sex for drugs and/or money. In calendar year 2004, there were two outbreaks that accounted for 26 of 37 total early syphilis cases in Kansas. One outbreak was in Wichita and revolved around a tight social/sexual network of mainly high school and college age individuals. The other was a diverse group of men who have sex with men (MSM) that frequently named social/sexual networks out-of-state (particularly in Kansas City, Missouri).

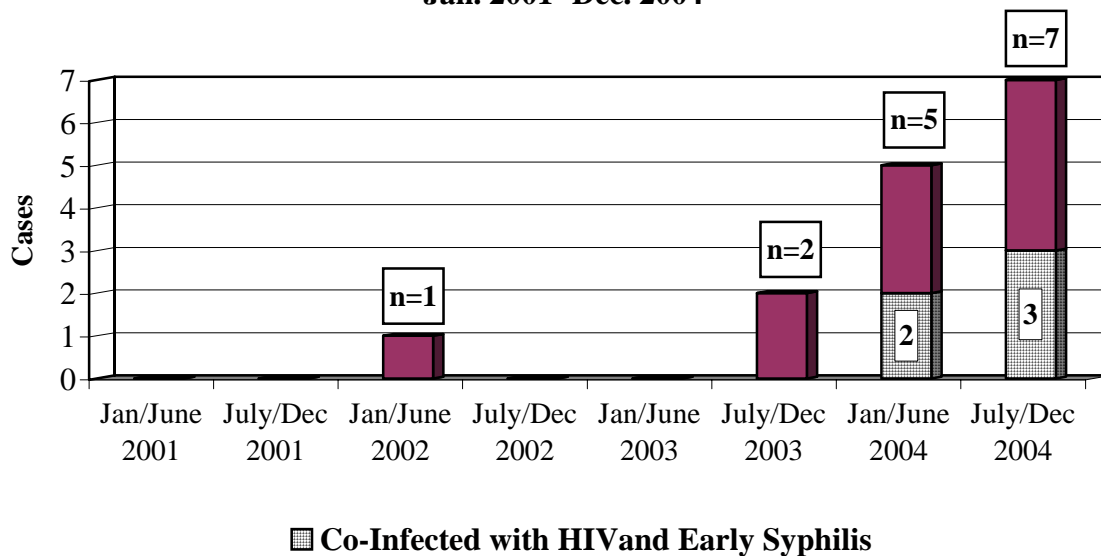
Wichita Outbreak

The outbreak in Wichita was concentrated within two zip codes. This type of outbreak responds well to traditional disease intervention activities (interviews/contact tracing). Through very intense disease intervention, that included re-assigning two Disease Intervention Specialists (DIS) and the Manager of Field Operation to Wichita for two weeks, the outbreak was confined to 13 weeks. There were a total of 14 cases reported; of which eleven were diagnosed as primary or secondary syphilis. Of the cases reported, 86% (12) were identified through intensive disease intervention activities. There were a total of 99 individuals initiated for investigation as a result of the outbreak. A total of 79 intensive disease intervention interviews (14 originals, 29 re-interviews, and 36 cluster interviews) were performed during the course of this outbreak. From the 14 cases, there were a total of 46 sexual partners initiated. Thirty-six of the 46 sexual partners were treated and nine were identified as new cases. Clustering, which is regarded as an essential component of a comprehensive syphilis control program in Kansas, produced 53 suspects and associates from the 14 cases during this investigation (suspects and associates are social (non-sexual) contacts to cases). From these suspects and associates three early syphilis cases were identified and brought to treatment, and eight were preventively treated. Seven of the fourteen reported cases were in high school or college. Marijuana and alcohol were co-factors in transmission of these cases. The age range of the cases was between 17 and 24 years of age, with the median age of 22. All 14 cases were African-American. The Kansas Department of Health and Environment (KDHE) responded to the outbreak in Wichita with a health alert for Sedgwick and surrounding counties (Attachment 1).

MSM Outbreak

Early syphilis cases in the men that have sex with men (MSM) population have been rising since the late 1990's across the United States. MSM populations that have syphilis are of particular concern because of the high rates of co-infection with HIV. Both of these trends have begun to manifest themselves in Kansas in the last 18 months.

Figure 1. Early Syphilis Cases Including Those Co-infected with HIV Among MSM in Kansas by Date of Diagnosis, Jan. 2001- Dec. 2004



Although MSM early syphilis cases in 2004 were distributed across five different counties, 11 of 12 cases lived within 60 miles of Kansas City, MO. Ten of these 11 named sexual contacts in the greater Kansas City, MO area. One MSM case with early syphilis was in Wichita and reported sexual contacts at parties in Texas as his major risk for syphilis. These early syphilis cases were fairly unproductive for disease intervention due to insufficient locating information and anonymous sexual encounters. DIS elicited 30 sexual partners but only initiated 10 for disease intervention from the 12 cases. Five of the 10 sexual partners initiated were treated for syphilis. There were five early syphilis cases co-infected with HIV in 2004, all were in the MSM population. Before 2004, the last early syphilis case co-infected with HIV was reported in 1999. The HIV/STD Section of the Bureau of Epidemiology and Disease Prevention sent a notice to medical providers across Kansas to alert them of this emerging situation in their MSM communities (Attachment 2).

State Summary

Thirty-three (89%) of the total 37 early syphilis cases reported in Kansas in 2004 were in three counties. Sedgwick County had a total of 19 cases, Wyandotte County had 10 cases and Johnson County had four cases. Twenty-four (65%) of 37 early syphilis cases reported in Kansas were primary or secondary syphilis.

African-Americans accounted for 59 percent (22 cases) of the reported early syphilis cases in Kansas in 2004. Whites accounted for 35 percent (13 cases) of the early syphilis cases. Hispanics and American Indians accounted for three percent each (1 case) of reported early syphilis cases in 2004.

The male to female ratio of the 37 early syphilis cases in Kansas for 2004 was 1:0.4 (23:14). The ratio is weighted heavily towards males due to the higher number of cases among MSM. Eleven out of 12 total MSM cases identified social networks outside of Kansas.

The median age of an individual infected with early syphilis was 23 years of age and the age range was 16 to 50 years of age. Sixty-two percent (23) of the early syphilis cases were diagnosed through public providers. During the CY2004, 28 percent (ten cases) of the early syphilis cases were reported in the 20-24 age group while 25 percent (nine cases) were reported in the 15-19 age group. Seventeen (six) and 11 (four) percent were in the 30-34 and 40-44 age groups respectively. There were three cases in the 45-54 age group and two cases in both the 35-39 and 25-29 age groups. Syphilis infections in Kansas have historically occurred with greater frequency in older adults. In CY2004, 19 (51 percent) of the 37 cases were reported in individuals 24 years of age and under. While only 24 percent (9 cases) were in the 35 and over age group. The change in age distribution this year is primarily due to the syphilis outbreak in Sedgwick County where the mean age was 22.

There were two presumptive congenital syphilis cases reported in Wyandotte County in 2004. The first report was the child of a mother that received prenatal care and tested negative for syphilis 7 weeks before delivery, but tested positive for syphilis at delivery. The infant had no signs or symptoms of congenital syphilis, but was presumptively treated. The second report was a mother who had received no prenatal care and presented at an emergency room to deliver. She tested positive for syphilis at delivery. The mother left the hospital the next day and was never located for an interview. The infant, which was abandoned at the hospital, had no symptoms of syphilis but had abnormal lab results indicative of syphilis. There was one congenital case reported in Kansas in 2003, which was also reported from Wyandotte County.

Attachment 1

Health Officials Investigating Syphilis Outbreak in Sedgwick County and Surrounding Area

The Kansas Department of Health and Environment (KDHE) is working with the Sedgwick County Health Department (SCHD) to investigate a syphilis outbreak in Sedgwick County and surrounding counties. Since April 1, health officials have identified eight positive syphilis cases in this area and have begun identifying contacts of the infected individuals. To date, 59 people have been identified and will be tested and receive treatment if needed.

During 2003, there were a total of five cases of syphilis in Sedgwick and surrounding counties. A total of 37 cases were reported statewide last year, with 30 of those occurring in an outbreak in Wyandotte and Johnson Counties.

KDHE is also investigating a second syphilis outbreak in the state among men who have sex with men (MSM). Since July 2003, there have been six cases of primary and secondary syphilis reported among this population in Kansas compared to only one case of syphilis among MSM from July 2001 through July 2003. Syphilis is a sexually transmitted disease caused by a bacteria and many of the signs and symptoms are similar to other diseases. The primary stage of syphilis is typically a single non-painful sore, but multiple sores may appear. The duration between infection and symptoms can be up to 90 days. Secondary stage includes a skin rash and mucous membrane lesions on one or more areas of the body. Many people infected with syphilis do not have symptoms for years although they are at risk for complications without treatment. After secondary symptoms disappear, the infection remains in the body and may damage organs including the brain, nerves, heart, blood vessels, liver, bones and joints. Late stage signs and symptoms include not being able to coordinate muscle movements, paralysis, numbness, gradual blindness and dementia. This damage may be serious enough to cause death. Pregnant women and their fetuses are of greatest concern.

You cannot tell if someone has syphilis by looking at them. To prevent infection, follow these guidelines:

- Practice abstinence or safer sex.
- Get tested for syphilis if suspect you are at risk.
- Contact your provider or the local health department for testing.
- Treatment is effective and available.

KDHE has sent letters to physicians in Sedgwick County and the surrounding area to notify them of the positive syphilis cases and the investigation. Through patient interviews and disease tracking, KDHE and county disease intervention staff have quickly located and tested many contacts to find disease in the early stages where fewer complications arise. Effective intervention is essential in preventing a syphilis outbreak from continuing to affect more and more individuals.

Attachment 2

Syphilis and Men Who Have Sex with Men (MSM) in Kansas 04/29/2004

Kansas may be seeing the beginning of a change in how syphilis is being transmitted in Kansas. The trend indicates an increase in the proportion of cases reporting to be men who have sex with men (MSM). Due to the small number of cases and early nature of this information, no conclusions can be made at this point.

Time Period	Men who have sex with men (MSM)	Heterosexual Sex	Heterosexual Sex/ Injection Drug Use	Total
Jan. 2001-Jun. 2001	0	11	2	13
Jul. 2001-Dec. 2001	0	28	3	31
Jan. 2002-Jun. 2002	1	16	2	19
Jul. 2002-Dec. 2002	0	18	2	20
Jan. 2003-Jun. 2003	0	19	2	21
Jul. 2003-Dec. 2003	2	12	2	16
Jan. 2004-Present	4	8	1	13

This information is being provided to alert populations at risk and Kansas Department of Health and Environment (KDHE) funded HIV/STD prevention organizations serving MSM. Current KDHE recommendations for these populations include simultaneous testing for HIV and syphilis in patients seeking testing for either disease. Additionally, KDHE provides voluntary partner counseling and referral services for infected individuals. Contractors of the KDHE HIV/STD Section need to ensure that you target information provided to at risk clients to include this emerging potential problem.

Nationally, the problem of increasing ratios of MSM with early syphilis has been occurring since the late 1990's. In Seattle, Washington, "the proportion of cases in MSM increased from 21% (four of 19) in 1997 to 85% in 1998 and 1999."¹ "After declining steadily for 10 years, the number of reported cases of primary and secondary (P&S) syphilis more than doubled in New York City from 117 in 2000 to 282 in 2001. The increases occurred primarily among men who have sex with men. Of particular concern is the high proportion of syphilis cases among MSM who also have human immunodeficiency virus (HIV)."² Similar trends are evident and have been documented in numerous urban areas across the United States. In Kansas, evidence of the same emerging problem is building with an increasing proportion of early syphilis in MSM and one recently diagnosed case of early syphilis in an MSM that is also co-infected with HIV.

Of additional interest are findings that "underscore the need for public health officials to understand the role of the Internet in facilitating the spread of sexually transmitted diseases (STDs), including the human immunodeficiency virus (HIV). With the assistance of community partners, other jurisdictions can examine the online social/sexual networks that are used commonly in the gay and bisexual communities and develop effective means of communicating prevention and control messages online"³

¹ Centers for Disease Control and Prevention. *Primary and Secondary Syphilis*. MMWR 2003;52: 1117-1120.

² Centers for Disease Control and Prevention. *Primary and Secondary Syphilis Among Men Who Have Sex with Men*. MMWR 2002;51: 835-856.

³ Centers for Disease Control and Prevention. *Internet Use and Early Syphilis Infection Among Men Who have Sex with Men*. MMWR 2003;52: 1229-1234.

In the last six months in Kansas, newly diagnosed HIV cases and at least one case of early syphilis have provided information citing the internet as a source for meeting anonymous partners.

Information on locations for HIV/STD prevention, testing, treatment and care can be obtained by calling 785-296-5596 or by going to the KDHE HIV/STD Section website <http://www.kdhe.state.ks.us/hiv-std>.